CLAIMS:

1. A liquid injection apparatus comprising:

a liquid container having a memory element which stores information about retained liquid;

a carriage mounting said liquid container and having a liquid injection head which injects said liquid; and

moving means which moves said carriage, the liquid injection apparatus characterized by comprising:

acquisition means that acquires information stored in a memory element which is equipped on a replacement liquid container replaceable with the liquid container mounted on said carriage and stores information about retained liquid;

decision means which determines whether or not to replace said liquid container mounted on said carriage with said replacement liquid container, based on the information acquired by said acquisition means; and

control means which controls said moving means in such a way as to move said carriage to a replacement position from a standby position in the case where said decision means has decided that replacement with said replacement liquid container should be done.

2. The liquid injection apparatus according to claim 1, characterized in that a color and remaining amount of liquid retained in the corresponding liquid container are stored as said information in each said memory element,

said acquisition means acquires the information stored in said memory element of the liquid container mounted on said carriage, and

said decision means decides that the liquid container should be replaced with said replacement liquid container in the case where the remaining amount of the liquid in the replacement liquid container is larger than a remaining amount of the liquid in the liquid container which is mounted on said

carriage and retains a liquid of the same color as that of the liquid in said replacement liquid container.

3. The liquid injection apparatus according to claim 1 or 2, characterized in that a plurality of liquid containers are mounted on said carriage, and when one of said liquid containers mounted on said carriage has been replaced with said replacement liquid container, if said acquisition means acquires information from a memory element provided in another replacement liquid container while the carriage is at the replacement position, said control means controls said moving means to replace with said another replacement liquid container one of the liquid containers on the carriage that retains a liquid of the same color as the liquid in said another replacement liquid container.

4. The liquid injection apparatus according to any one of claims 1 to 3, characterized in that in the case where said acquisition means has not acquired information from a memory element provided in another replacement liquid container after a predetermined time has passed since replacement of the liquid container on said carriage with said replacement liquid container at said replacement position, said control means controls said moving means in such a way as to move said carriage at said replacement position to said standby position.

5. The liquid injection apparatus according to any one of claims 1 to 4, characterized by further comprising operation means which is operated to drive said moving means arbitrarily to move said carriage to said replacement position and said standby position regardless of a decision by said decision means.

6. The liquid injection apparatus according to any one

of claims 1 to 5, characterized by further comprising display control means for displaying on a display device information stored in the memory element in said replacement liquid container, acquired by said acquisition means.

7. A liquid injection apparatus characterized by comprising:

a liquid container having a memory element which stores information about retained liquid;

a carriage mounting said liquid container in a detachable manner and having a liquid injection head which injects the liquid;

moving means which moves said carriage; and

a housing having a cover portion which covers said liquid container and said carriage in such a way as to make it impossible to replace said liquid container at a predetermined position in a moving area of said carriage, and characterized in that

a first communication section is connected to said memory element, and information acquisition means having a second communication section communicatable in a non-contact manner is provided at a portion of said cover portion that faces said first communication section.

8. The liquid injection apparatus according to claim 7, characterized in that said liquid container has a bottom, a top opposite to said bottom, and sides extending between said bottom and said top, a liquid supply port is provided in said bottom for supplying a liquid to said liquid injection head, and said first communication section is provided on said top.

9. The liquid injection apparatus according to claim 7 or 8, characterized in that a plurality of liquid containers are mounted on said carriage in a detachable manner, and at least the liquid container that is at a position

communicatable with said second communication section is covered with said cover portion.

10. The liquid injection apparatus according to any one of claims 7 to 9, characterized in that the movement area of said carriage includes a first zone set for injecting a liquid toward a predetermined target and a remaining second zone, and said cover portion is provided in association with said second zone.

11. A control method for a liquid injection apparatus which performs liquid injection while moving a carriage on which a liquid container is mounted, the liquid container having a memory element which stores information about retained liquid, and the carriage having a liquid injection head which injects said liquid, the method characterized by comprising:

acquiring information about a liquid, stored in a memory element equipped on a replacement liquid container replaceable with the liquid container mounted on said carriage;

determining whether or not to replace said liquid container mounted on said carriage with said replacement liquid container, based on the information about the liquid in said replacement liquid container; and

moving said carriage to a replacement position in the case where it is decided that the liquid container mounted on said carriage should be replaced with said replacement liquid container.

12. The method for a liquid injection apparatus according to claim 11, characterized by further comprising acquiring the information stored in said memory element of the liquid container mounted on said carriage, and characterized in that

a color and remaining amount of liquid retained in the

corresponding liquid container are stored as said information in each said memory element, and

it is decided that the liquid container should be replaced with said replacement liquid container in the case where the remaining amount of the liquid in the replacement liquid container is larger than a remaining amount of the liquid in the liquid container which is mounted on said carriage and retains a liquid of the same color as that of the liquid in said replacement liquid container.

13. The method for a liquid injection apparatus according to claim 11 or 12, characterized by further comprising displaying on a display device the acquired information about the liquid in said replacement liquid container.

14. A control program for a computer of a liquid injection apparatus which performs liquid injection while moving a carriage on which a liquid container is mounted, the liquid container having a memory element which stores information about retained liquid, and the carriage having a liquid injection head which injects said liquid, wherein the control program allows the computer to function as:

means for acquiring information about a liquid, stored in a memory element equipped on a replacement liquid container replaceable with the liquid container mounted on said carriage;

means for determining whether or not to replace said liquid container mounted on said carriage with said replacement liquid container, based on the information about a liquid in said replacement liquid container; and

means for moving said carriage to a replacement position in the case where it is decided that the liquid container mounted on said carriage should be replaced with said replacement liquid container.

15. The control program according to claim 14, characterized by allowing said computer to further function as means for acquiring the information stored in said memory element of the liquid container mounted on said carriage, and characterized in that

a color and remaining amount of liquid retained in the corresponding liquid container are stored as said information in each said memory element, and

it is decided that the liquid container should be replaced with said replacement liquid container in the case where a remaining amount of the liquid in the replacement liquid container is larger than the remaining amount of the liquid in the liquid container which is mounted on said carriage and retains a liquid of the same color as that of the liquid in said replacement liquid container.

16. The control program according to claim 14 or 15, characterized by allowing said computer to further function as means for displaying on a display device the acquired information about the liquid in said replacement liquid container.